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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,743	11/13/2000	Michael Fred Linkler	031683/002573US	4706

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EXAMINER

SALVATORE, LYNDIA

ART UNIT PAPER NUMBER

1771

DATE MAILED: 04/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/709,743

Applicant(s)

ENKLER ET AL.

Examiner

Lynda M Salvatore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 18 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 03/26/01 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.
2. The specification, search report, or the German Examiner does not provide any relevance for German Patents DE 44 09 416 C1 and DE 41 28 927 A1.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 1 is indefinite because of the phrase "in contact with". As described, the layers have no means for attachment and no defined orientation; therefore it is unclear how the individual layers would form the heat-insulating and soundproofing lining of the instant invention. Claims 2-19 are rejected for their dependency on claim 1.
6. Claim 1 is further indefinite because it is unclear to the examiner which covering layer is "in contact with" the duroplastic foam layer.

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7. Claims 10-14 recite the limitation of the sound-absorbing layer in the heat-insulating and soundproofing lining. There is insufficient antecedent basis for this limitation in the claim. Does applicant mean to replace soundproofing with sound absorbing or is there a separate sound absorbing layer altogether?

8. Claims 15 and 16 are indefinite because of the term "grid-like". The specification fails to provide a standard measure for "grid-like" and is therefore unclear to the examiner what is meant by the term "grid-like". Claims 15 and 16 are further indefinite because no functional definition is provided with having a "grid-like" shaping. Is the "grid-like" shaping intended to impart special acoustic, thermal or strengthening properties to either the duroplastic or soundproofing layers?

9. Claim 17 is indefinite because it is unclear where the area of increased thermal load is located. Additionally, the metal foil that is intended to be located in the increased thermal load area has no placement, orientation or means for attachment.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined

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was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

11. Claims 1, 13, 17-22 and 24 are rejected under 35 U.S.C. 102 (e) for being anticipated by Alts, US 6,145,617.

The Alts patent is directed towards an ultra-light multifunctional sound-insulating kit (Title). Alts teaches the combination of a soft-elastic open-pored layer with a microporous fiber layer or fiber/foam composite layer arranged thereover to obtain sound absorption/insulation and heat insulation (Column 2, lines 43-50). One embodiment of the invention as shown in figure 10, may be used the engine compartment of a motor vehicle. Figure 10 shows a composite having on the motor face side, a oil and water protective fleece connected to a microporous stiffening layer, followed by a spring layer (Column 6, lines 10-15). The assembly package of the invention may be adhered to the areal vehicle part or as shown in figure 10, using a carrier layer to provide added stability (Column 6, lines 25-27 and 35-37). The microporous stiffening layer material disclosed by Alts varies between embodiments. In figure 10 the microporous-stiffening layer consists of highly pressed fiber material (Column 6, lines 13-15), however, it may also consist of an open-pored fiber of a fiber/foam composite (Columns 3 and 4, lines 65-67 and line 1 respectively). The spring layer may consist of foam or a duroplastic mixed fiber fleece, thermomoulded foam, or a PU molded foam having an approximate thickness of 15mm (Column 6, lines 21-35). The carrier layer is described as consisting of highly pressed fiber material and is also shown in figure 8 (Column 5, lines 6-8). Alts also illustrates in figure 9, the addition of an aluminum foil layer that is adhered to the porous spring layer for better sound

insulation (Column 5, lines 40-50). All the layers of the composite taught by Alts may be connected to one another mechanically (stitched) or by adhesive (Column 2, lines 29-32).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2, 3, 4-12, 14-16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alts. US 6,614,561.

Claims 2 and 23 defines the duroplastic foam layer as having specific physical properties of long-term thermal stability and loadability. The Alts reference discloses an open-pored spring layer consisting of a duroplastic mixed fleece layer or thermomoulded foam of a PU moulded foam (Column 6, lines 32-35). While the Alts reference does not expressly state those particular physical properties it would be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claim 3 specifies the natural and synthetic fibers as needed. Depending on the materials used, the Alts reference discloses a spring layer that may consist of a duroplastic mixed fiber fleece. Alts does not specifically state that the fleece is needled, however, it is known that fleece is a needled fabric. It has been held to be within the general skill of a worker in the art to select a

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select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claim 4 of the instant invention recites a structural limitation. The Alts reference teaches the spring layer consisting of duroplastic mixed fleece (Column 6, lines 32-35). Selecting natural or synthetic fibers that are non-neededled would be within the general skill of a worker in the art because non-neededled webs are a known alternative to neededled webs. *In re Leshin*, 125 USPQ 416.

Claims 5-7 further impose structural and material limitations of the first and second covering layers. The Alts reference disclose a oil and water protective fleece layer the side of the motor face (Column 6, lines 10-15) and a carrier layer defined as highly pressed fiber which serves to provide stability when adhered to the areal vehicle part (Column 6, lines 25-27 and 35-37). Thin needle-punched and spunbonded non-wovens are very well known processing techniques used to produce strengthened textiles. Therefore, it would be obvious have a fiber layer covering material for use in an engine compartment processed using those methods. It would also be obvious to one of ordinary skill in the art to select materials such as those claimed in claims 5-7 as obvious design choices because those materials are commonly used in heat-insulating and sound absorbing composites because of there high temperature resistance and absorbing properties. *In re Leshin*, 125 USPQ 416.

Claim 9 limits the duroplastic foam layer to the use of open-cell foam melamine based resins. The duroplastic foam layer of applicants claimed invention is analogous to the microporous stiffening layer of the Alts reference whereas the microporous layer may further consist of a open-pored foam/fiber composite (Columns 3 and 4, lines 65-67 and line 1

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respectively). Selecting the claimed melamine foam would be obvious to one of ordinary skill in the art because melamine resins are known to have good heat and sound insulation properties. *In re Leshin*, 125 USPQ 416.

Claims 8, 10-12, and 14 recites specific values and ranges to further limit the claimed subject matter. The carrier layer of the Alts reference discloses an area-weight of approximately .5 kg/m² or 500g/m² instead of the claimed range of 30 to 200 g/m². The spring layer of the Alts reference which may consist of a duroplastic mixed fleece or foam is disclosed as having a volumetric weight of .3 kg/m²–1.0 kg/m² depending on which material is used (Column 6, lines 18-23). The overall material thickness disclosed by Alts is 15mm thick (Column 6, lines 15-21). Since the prior art discloses the general conditions of the applicants claimed invention, discovering the optimum value or range would only involve routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Claims 15 and 16 disclose the duroplastic foam layer and the soundproofing layer as having a "grid-like" shaping. Since it is unclear to the examiner how the applicant defines "grid-like", "Grid-like" shaping is interpreted to mean having any various pattern or shape. As disclosed by the applicant, the "grid-like" shaping does not contribute to the heat or sound insulating properties of the claimed invention. Therefore, using a known material having a varied shape or pattern would be a matter of obvious design choice and would be within the general skill of a worker in the art to select such a material. *In re Leshin*, 125 USPQ 416.

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Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In addition, the following reference is cited of interest for discussing various aspects of the applicant's invention.


US 5,527,598

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 703-305-4070. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

ls
April 19, 2002


CHERYL A. JISKA
PRIMARY EXAMINER